



## **WATER RESOURCES RESEARCH GRANT PROPOSAL**

**Project ID:** 2002ID1B

**Title:** Metal(loid) Release from Contaminated Sediments in Lake Coeur d'Alene, Idaho

**Project Type:** Research

**Focus Categories:** Sediments, Toxic Substances, Surface Water

**Keywords:** heavy metals, mining sediments, contaminant flux

**Start Date:** 03/01/2002

**End Date:** 02/28/2003

**Federal Funds Requested:** \$14,997

**Non-Federal Matching Funds Requested:** \$29,996

**Congressional District:** 1

**Principal Investigator:**

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**Abstract**

Lake Coeur d'Alene (CDA) in Idaho is the second largest natural lake in the Inland Northwest. Lake CDA provides drinking water for at least five communities and serves as a primary recreational area for inhabitants of the Pacific Northwest. Over the last century Lake CDA became and continues to be, the major collecting bed for contaminated sediments produced during mining and ore processing activities. As a result of these mining activities tailings enriched in Pb, Zn, As, Cd, and other trace elements were deposited in stream banks and bars along the South Fork and main stem of the Coeur d'Alene River. These materials have been regularly resuspended during periods of high stream flow and secondarily transported into Lake CDA. The USGS has estimated that as much as 85% of the lake bottom is contaminated with metal(loids) (Horowitz et al., 1992). The overriding concern of management agencies responsible for lake water quality is the potential release of the accumulated metal(loids) into the overlying water column.